

| Research Outputs | 86 |
|--|-----|
| HERDC Research Income Summary (All Categories) | 87 |
| HERDC Category 1 — Australian Competitive Grants Research Income | 88 |
| HERDC Category 2 — Other Public Sector Research Income | 90 |
| HERDC Category 3 — Industry and Other Research Income | 92 |
| HERDC Category 4 — CRC Research Income | 94 |
| FTE Staffing Profile | 96 |
| Esteem Measures | 97 |
| Patents Granted | 98 |
| Registered Designs | 99 |
| Plant Breeder's Rights | 100 |
| National Health and Medical Research Council (NHMRC) Endorsed Guidelines | 100 |
| Research Commercialisation Income | 101 |

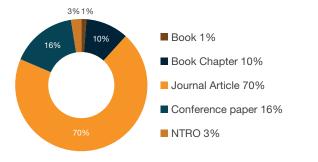
SECTION 2 Overview by Two-Digit Fields of Research Code

Section 2 provides a summary of ERA 2015 data at the two–digit Fields of Research (FoR) level for research outputs, HERDC income, staffing, esteem amd applied measures. A detailed breakdown of all these indicators at the two–digit and four–digit levels is shown in **Section 4** of this report.

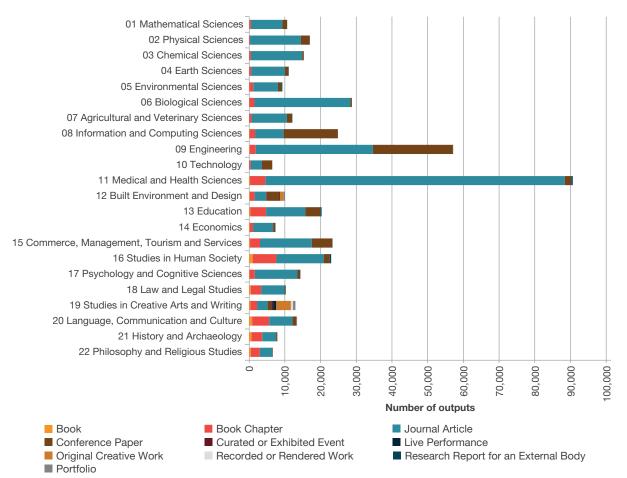
Research Outputs

All 41 eligible higher education institutions submitted research outputs for evaluation to ERA 2015. Over 430,000 outputs across 157 four–digit Fields of Research (FoR) codes were submitted. The majority of the outputs were journal articles (70 per cent) followed by conference papers (16 per cent). Non–traditional research outputs (NTRO) constituted approximately three per cent of the outputs submitted to ERA 2015. See **Section 4** for a detailed breakdown.

RESEARCH OUTPUTS BY TYPE – ALL SUBMITTED OUTPUTS



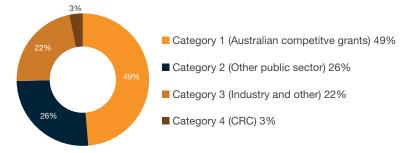
RESEARCH OUTPUTS BY TYPE BY TWO-DIGIT FOR CODE



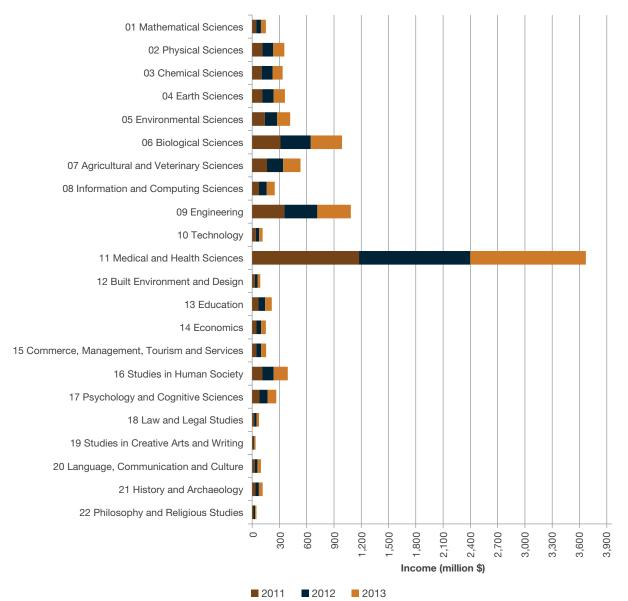
HERDC Research Income Summary (All Categories)

Over \$9.90 billion in research funding was submitted to ERA 2015 in the research income reference period (1 January 2011–31 December 2013), with around 49 per cent of all research income submitted being HERDC Category 1 – Australian Competitive Grants. See **Section 4** for a detailed breakdown.

HERDC RESEARCH INCOME BY CATEGORY

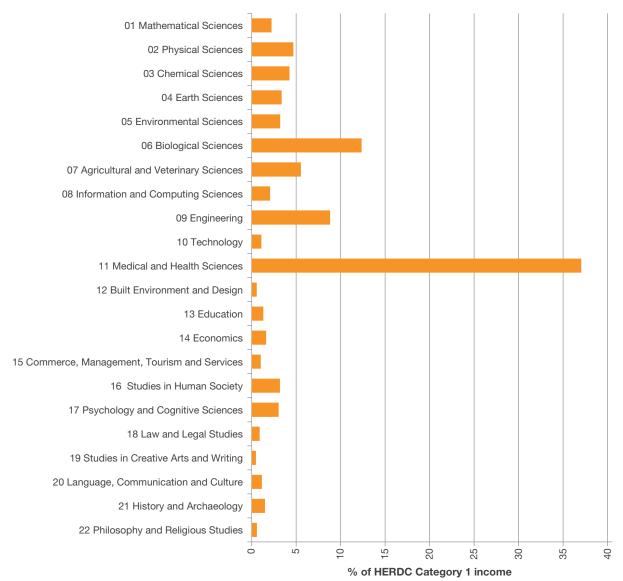


HERDC RESEARCH INCOME (ALL CATEGORIES) BY YEAR BY TWO-DIGIT FOR CODE

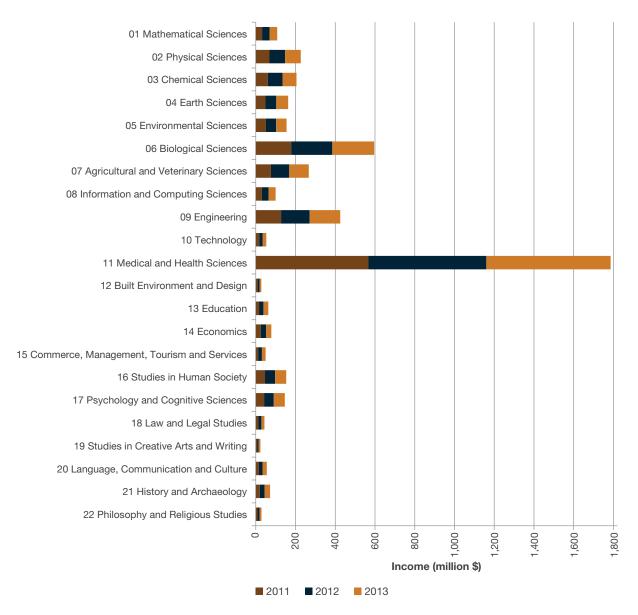


HERDC Category 1 — Australian Competitive Grants Research Income

Over \$4.82 billion of Australian Competitive Grants research income was submitted to ERA 2015. The two-digit FoR codes with the highest percentage of HERDC Category 1 income were 11 Medical and Health Sciences (37 per cent), followed by 06 Biological Sciences (12 per cent) and 09 Engineering (9 per cent). The yearly income amounts by two-digit code are shown in the second chart (million \$). See **Section 4** for a detailed breakdown.



HERDC CATEGORY 1 RESEARCH INCOME BY TWO-DIGIT FOR CODE

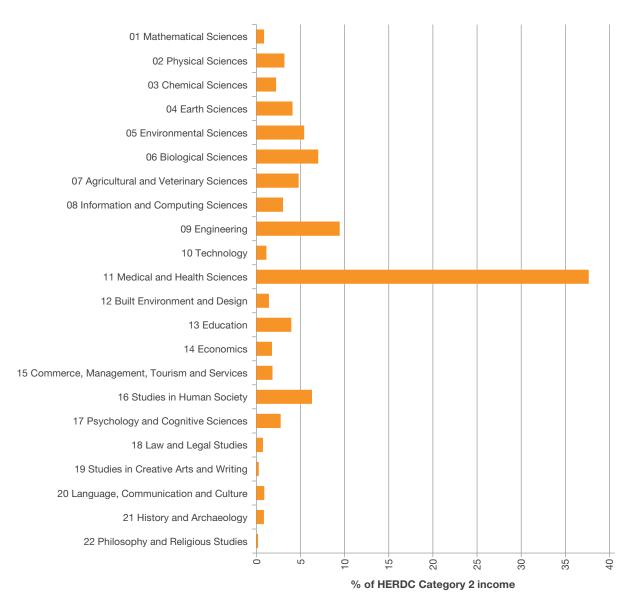


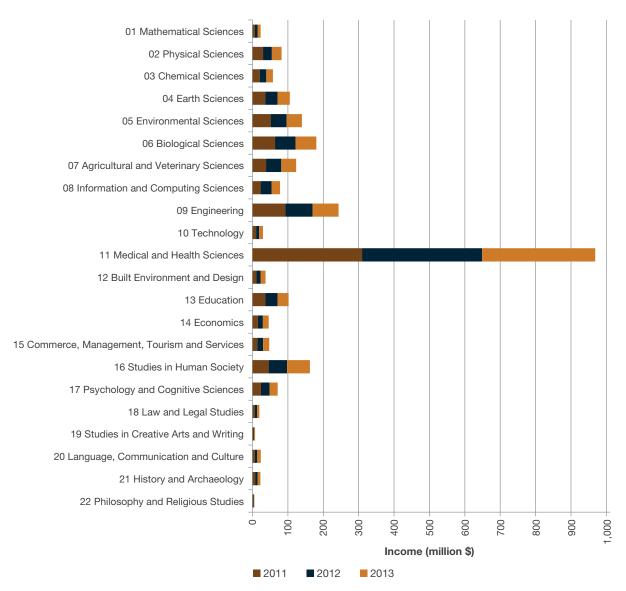
HERDC CATEGORY 1 RESEARCH INCOME BY YEAR BY TWO-DIGIT FOR CODE

HERDC Category 2 — Other Public Sector Research Income

Over \$2.57 billion of Other Public Sector Research Income was submitted to ERA 2015. The two-digit FoR codes with the highest percentage of HERDC Category 2 income were 11 Medical and Health Sciences (38 per cent), followed by 09 Engineering (9 per cent) and 06 Biological Sciences (7 per cent). The yearly income amounts by two-digit code are shown in the second chart (million \$). See **Section 4** for a detailed breakdown.

HERDC CATEGORY 2 RESEARCH INCOME BY TWO-DIGIT FOR CODE



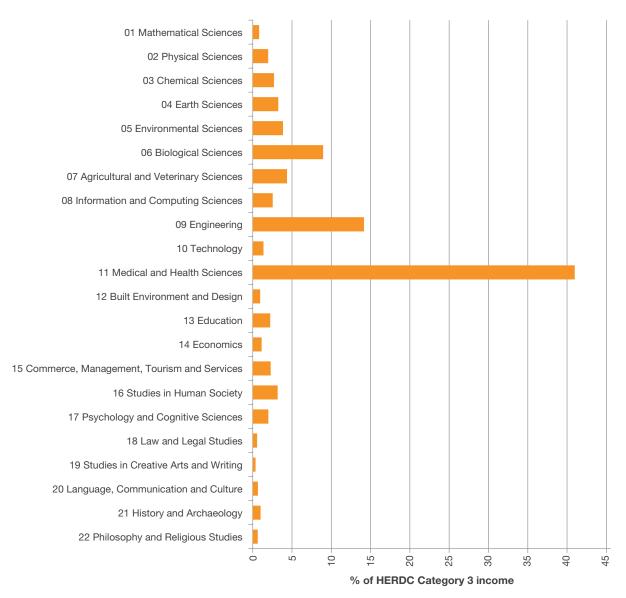


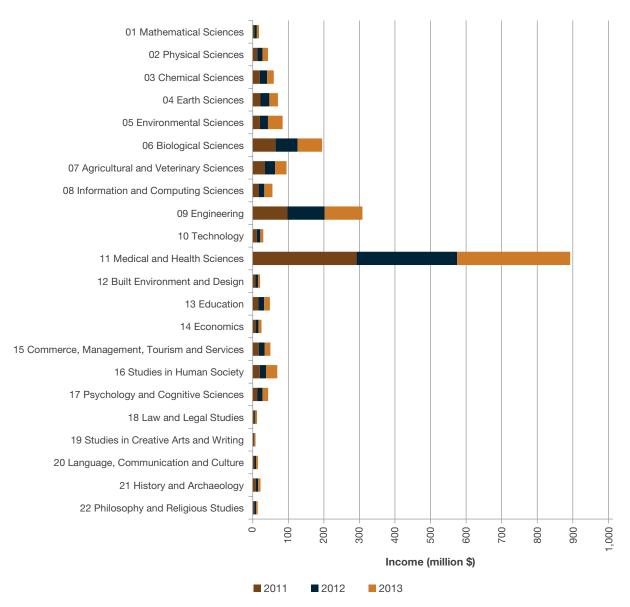
HERDC CATEGORY 2 RESEARCH INCOME BY YEAR BY TWO-DIGIT FOR CODE

HERDC Category 3 — Industry and Other Research Income

Over \$2.17 billion of Industry and Other Research Income was submitted to ERA 2015. The two-digit FoR codes with the highest percentage of HERDC Category 3 income were 11 Medical and Health Sciences (41 per cent), followed by 09 Engineering (14 per cent) and 06 Biological Sciences (9 per cent). The yearly income amounts by two-digit code are shown in the second chart (million \$). See **Section 4** for a detailed breakdown.

HERDC CATEGORY 3 RESEARCH INCOME BY TWO-DIGIT FOR CODE

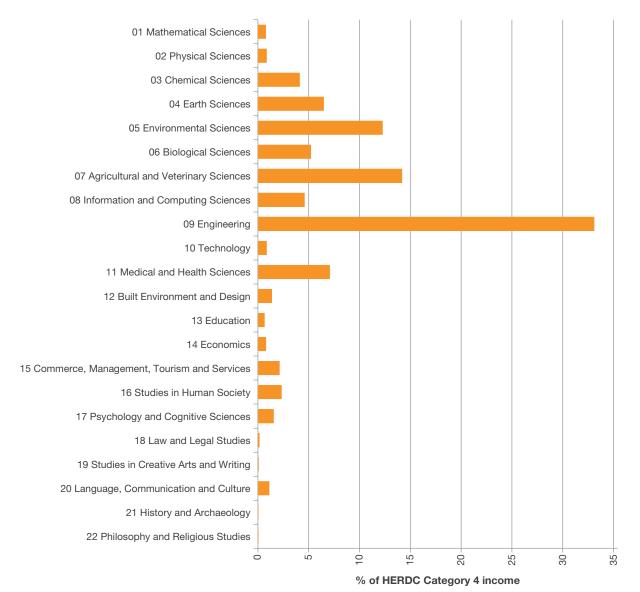




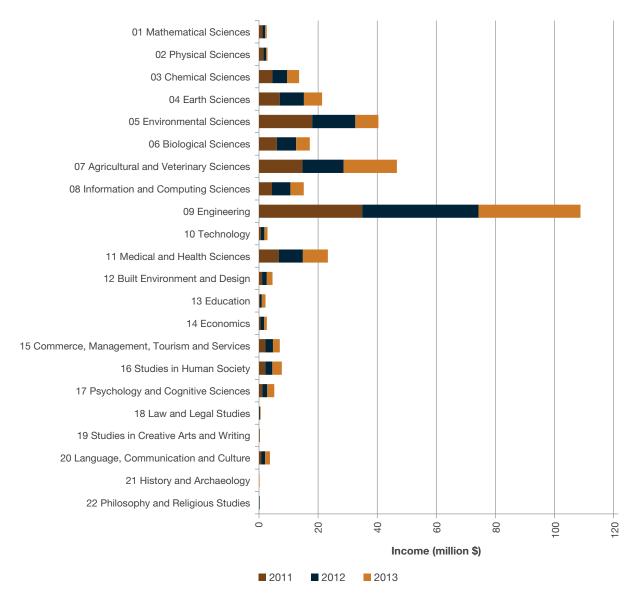
HERDC CATEGORY 3 RESEARCH INCOME BY YEAR BY TWO-DIGIT FOR CODE

HERDC Category 4 — CRC Research Income

Over \$328 million of Cooperative Research Centre (CRC) income was submitted to ERA 2015. The two-digit FoR codes with the highest percentage of HERDC Category 4 income were 09 Engineering (33 per cent), followed by 07 Agricultural and Veterinary Sciences (14 per cent) and 05 Environmental Sciences (12 per cent). The yearly income amounts by two-digit code are shown in the second chart (million \$). See **Section 4** for a detailed breakdown.



HERDC CATEGORY 4 RESEARCH INCOME BY TWO-DIGIT FOR CODE



HERDC CATEGORY 4 RESEARCH INCOME BY YEAR BY TWO-DIGIT FOR CODE

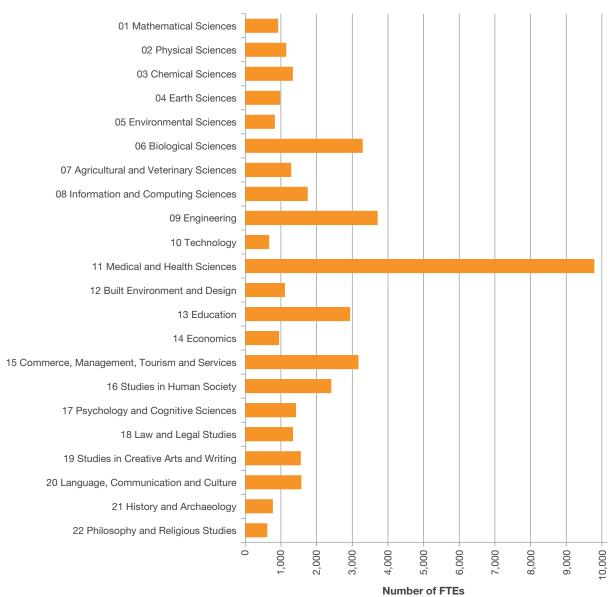
FTE Staffing Profile

Over 43,000 eligible FTE staff (over 47,000 actual individuals) were submitted to ERA 2015. Level B staff had the highest number of FTE staff by level. The two–digit FoR codes with the largest number of FTE staff was 11 Medical and Health Sciences, followed by 09 Engineering, 06 Biological Sciences and 15 Commerce, Management, Tourism and Services. See **Section 4** for a detailed breakdown.

HESDC LEVEL BY FTE AND HEADCOUNT

| HESDC | FTE | % FTE | FTE Headcount | % FTE Headcount |
|---------|----------|-------|---------------|-----------------|
| Level E | 6,142.6 | 14.1 | 6,649.0 | 14.0 |
| Level D | 5,298.4 | 12.2 | 5,615.0 | 11.8 |
| Level C | 9,567.7 | 22.0 | 10,226.0 | 21.6 |
| Level B | 12,657.1 | 29.0 | 13,795.0 | 29.1 |
| Level A | 6,081.3 | 14.0 | 6,784.0 | 14.3 |
| Other | 3,834.6 | 8.8 | 4,332.0 | 9.1 |
| Total | 43,581.8 | 100.0 | 47,401.0 | 100.0 |

STAFFING PROFILE BY FTE BY TWO-DIGIT FOR CODE



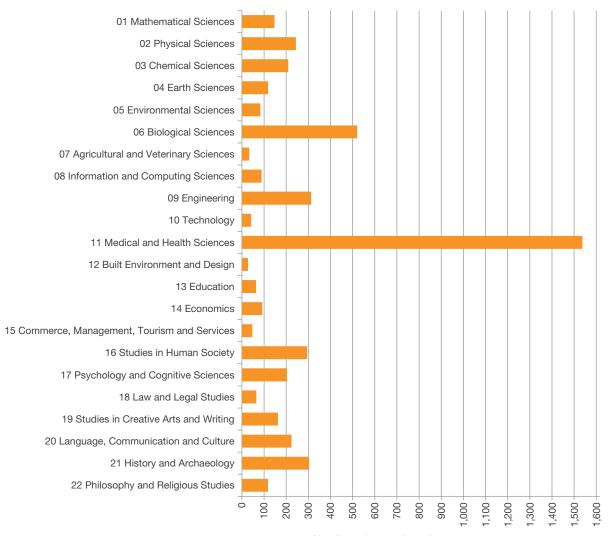
Esteem Measures

Esteem measures eligible for ERA 2015 embody a measure of prestige and are recognised by experts within the discipline as a highly desired, highly regarded form of accolade or acknowledgment. Almost two-thirds of apportioned esteem measures were Recipients of a Nationally Competitive Research Fellowship (Category 1), while Membership of a Learned Academy or Membership of AIATSIS accounted for most of the remaining total amount of esteem measures. The two-digit codes which had the highest total number of apportioned esteem measures were 11 Medical and Health Sciences and 06 Biological Sciences. See **Section 4** for a detailed breakdown.

APPORTIONED ESTEEM MEASURES BY TYPE



APPORTIONED ESTEEM MEASURES BY TWO-DIGIT FOR CODE



Number of apportioned esteem measures

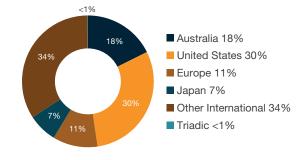
Patents Granted

Eligible patents for ERA 2015 include Australian standard patents and their international equivalents, but not Australian innovation patents. 'Other International' includes all other countries not listed in the table below. Triadic patents are a series of corresponding patents filed at the European Patent Office (EPO), the United States Patent and Trademark Office (USPTO) and the Japan Patent Office (JPO), for the same invention by the same applicant or inventor. A total of 936 patents were submitted to ERA 2015. Over a third were submitted in the category of 'Other International'. See **Section 4** for a detailed breakdown.

NUMBER OF PATENTS GRANTED BY COUNTRY

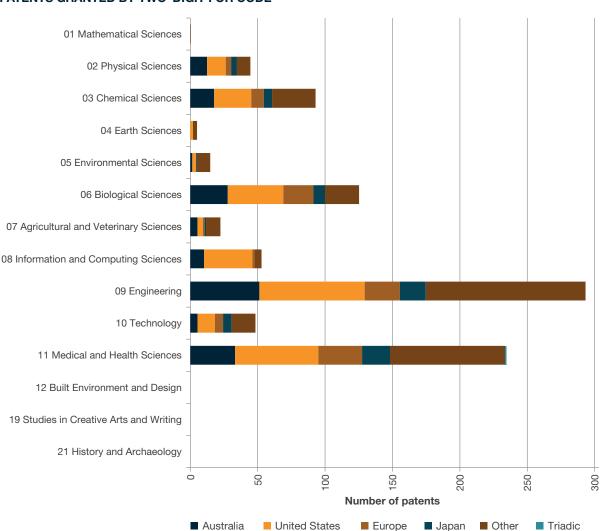
| Country or Type | Patents Granted |
|---------------------|-----------------|
| Australia | 165.0 |
| United States | 280.0 |
| Europe | 103.0 |
| Japan | 67.0 |
| Other International | 318.0 |
| Triadic | 1.0 |
| Total* | 936.0 |

* Note: Triadic patents count as three patents in the Total



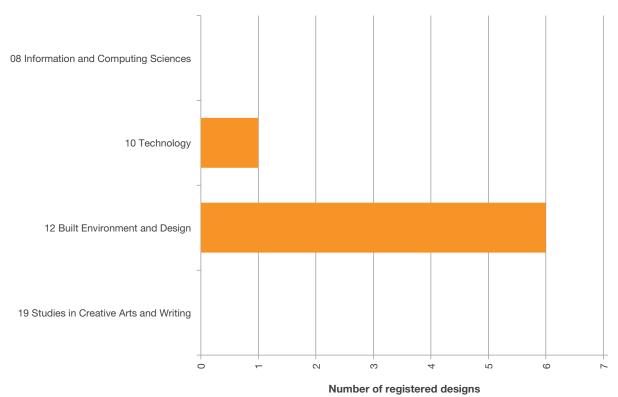
PATENTS GRANTED BY COUNTRY (%)

PATENTS GRANTED BY TWO-DIGIT FOR CODE



Registered Designs

Registered designs were required to demonstrate a clear link between the registered design and the related research to be eligible for submission to ERA 2015. Only those registered designs which were certified in Australia were eligible for submission. There were seven registered designs submitted to ERA 2015, six in 12 Built Environment and Design and one in 10 Technology. See **Section 4** for a detailed breakdown.



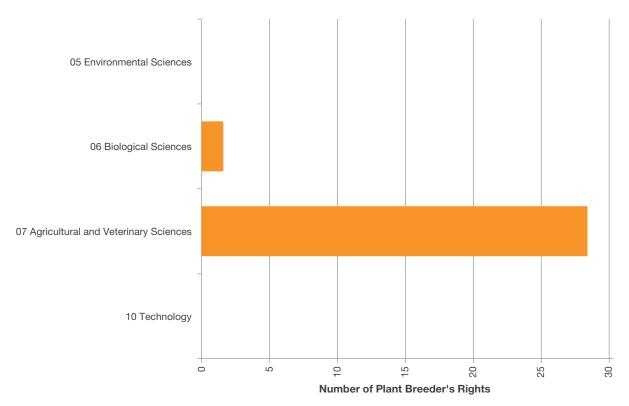
REGISTERED DESIGNS BY TWO-DIGIT FOR CODE

Note: Two-digit FoR codes that do not use registered designs as an applied measure are not shown in the bar chart. See **Section 4** for a detailed breakdown.

Plant Breeder's Rights

Eligible Plant Breeder's Rights for ERA 2015 are those granted under the *Plant Breeder's Rights Act 1994* (Cth) or their international equivalents. Provisional protection Plant Breeder's Rights were ineligible for submission. A total of 30 Plant Breeder's Rights were submitted to ERA 2015, 28.4 were apportioned to 07 Agricultural and Veterinary Sciences and 1.6 were apportioned to 06 Biological Sciences. See **Section 4** for a detailed breakdown.





Note: Two-digit FoR codes that do not use Plant Breeder's Rights as an applied measure are not shown in the bar chart. See **Section 4** for a detailed breakdown.

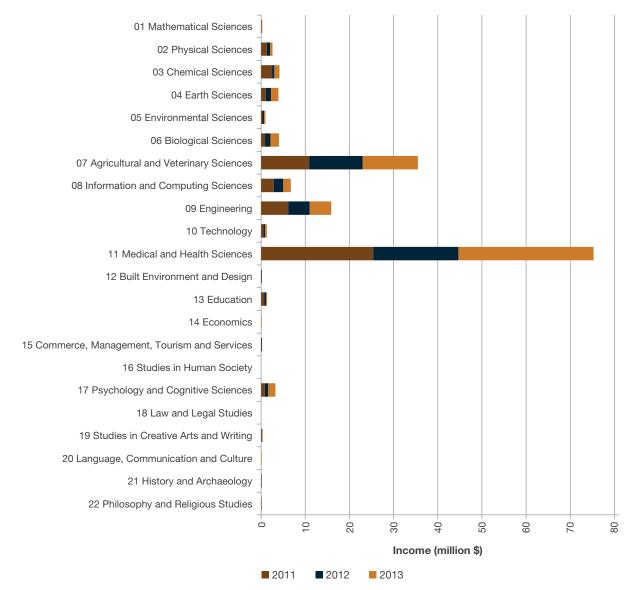
National Health and Medical Research Council (NHMRC) Endorsed Guidelines

NHMRC Endorsed Guidelines include those on population health, clinical practice and ethics. This indicator was applicable to the two–digit and four–digit Medical and Health Sciences FoR codes. A total of 64 NHMRC Endorsed Guidelines were submitted to ERA 2015. See **Section 4** for a detailed breakdown.

Research Commercialisation Income

A total of \$155 million of research commercialisation income was submitted to ERA 2015. The two–digit FoR codes with the largest amount of research commercialisation income were 11 Medical and Health Sciences followed by 07 Agricultural and Veterinary Sciences. See **Section 4** for a detailed breakdown.





Note: Two- and four-digit FoR codes for Law and Legal Studies (18) do not use research commercialisation income as an applied measure nor do some underlying four-digit codes in Medical and Health Sciences (11). See **Section 4** for more detail.